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MARYLAND SCHOOL BULLETIN

CONSERVATION-OF-VISION
PROGRAM FOR
MARYLAND COUNTY SCHOOLS

VOL. XXVI

JANUARY, 1945

No. 4



ISSUED BY
STATE DEPARTMENT OF EDUCATION
BALTIMORE • MARYLAND

Lester, Eileen E.

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FOREWORD

For many years the State Department of Education has been interested in the problems confronting children who have eye difficulties. Co-operative agreements with State and County Health Departments, looking to the proper diagnosis and classification of such handicapped children, have been in effect for some time, and in some cases the Maryland Society for the Prevention of Blindness has helped by giving treatments and by providing glasses. A close working relationship exists, also, between the Department and the State School for the Blind in the provision of educational facilities for children whose vision is 20/200 or less with best correction.

The Vocational Rehabilitation Division of the State Department of Education makes available to all visually handicapped persons under the age of sixteen vocational guidance, training, and placement. An advisory committee, representing health, welfare, and educational agencies, assists the Department in establishing policies and procedures for the promotion of a well-rounded program for the blind and the partially sighted of all ages.

The purpose of this bulletin is to provide information about the Maryland program for the conservation of vision and to give some practical suggestions to persons most interested in the children concerned. The material was prepared by Miss Eileen Lester, Executive Secretary of the Maryland Society for the Prevention of Blindness, and was revised by Mr. R. C. Thompson, Director Vocational Rehabilitation of the State Department of Education. Miss Merle S. Bateman, Editor of Publications in the Department, edited the bulletin and supervised its printing.

THOMAS G. PULLEN, JR.,
State Superintendent of Schools

PART I

CONSERVATION OF SIGHT AND PREVENTION OF BLINDNESS

CARE OF THE EYES OF YOUNG CHILDREN

During the first few months the eyes of an infant do not work together. He must learn to use his eyes just as he learns to walk. By his first birthday visual coordination should be fairly well established, and the ability of the eyes to work in unison improves throughout early childhood.

As a rule the eyes of a healthy infant require no special treatment. Drops or washes should not be used unless prescribed by a physician. If the eyelids become swollen and red and a discharge appears, the child should be taken at once to a physician for examination. Every hour of delay may add to the danger of a permanent partial visual loss, if not of blindness. Constant vigilance is the price you pay for your baby's eyesight.

A young child's eyes should be protected from the glare of strong sunlight. The crib or cab should be so placed that the baby will not face the direct rays of the sun, and the walls and ceiling of the nursery should be of a soft, dull tint, to prevent glare. Toys should never be hung directly in front of a baby's eyes.

During the convalescent period of certain infectious diseases such as measles and scarlet fever, play materials that do not require close use of the eyes should be provided. Books with fine print and few pictures, puzzles with small pieces, and paper dolls requiring fine cutting may cause eye fatigue.

It is important to teach children not to rub their eyes with soiled hands or handkerchiefs. Habits of good eye hygiene can be taught to young children in the form of games or play.

The most frequent injury to the eye results from foreign bodies that imbed themselves either in the surface of the eyeball or under the lids. If the lid is turned back with clean hands and then a clean cotton applicator or tissue is used, a particle on the under surface can be removed easily and without further injury to the eye. The profuse tearing caused by the foreign body may wash it away. If not, the layman should never do more than touch it lightly with the clean tissue. If the foreign body is imbedded on the surface of the eyeball (the cornea), the child must be taken to a doctor immediately. Delay or attempts to remove the particle may cause germs to enter the delicate tissues of the eye and infect them. Only an eye physician can treat the eye properly if the tissues have been injured. Proper treatment can prevent many serious eye infections which might otherwise result.

The careful selection of toys and books can do much to safeguard children's eyes. Choose for young children play materials which offer no eye hazards. Do not buy blocks or other toys with sharp corners or projections, and do not allow the use of pointed scissors. Books for young children should have clear pictures and distinct, large letters and should be light in weight. Children should be taught how to hold their books properly. Never permit a child to run while carrying sharp or pointed objects. Since the eyes are one of a child's most valuable possessions, every possible precaution should be taken to protect them from unnecessary injury, which may lead to total or partial blindness.

Finally, perhaps most important in the care of a child's eyes is a thorough examination by a competent eye physician shortly before the child enters school (or earlier if there is doubt about his ability to see), in order to judge whether he can safely take advantage of the various educational opportunities. A child with poor vision will not be an alert, enthusiastic pupil. A complete examination should include consideration of the child's general health, because the eye is closely integrated with the rest of the body.

Parents should welcome the use of drops during an eye examination, as they enable the doctor to measure the refractive error exactly and may help him to discover an error which otherwise might be overlooked.

If a child wears glasses, the parents should let his teacher know the reason and also the extent to which the glasses are to be used and should make certain that they are clean and properly adjusted when the child leaves for school.

Do not allow in the presence of the child unwise remarks which will make him self-conscious or ashamed that he has to wear glasses. Taunts of other children have caused many a child to discard his glasses.

CAUSES OF BLINDNESS AND METHODS OF PREVENTION

Among the leading causes of blindness in infants are the hereditary or congenital conditions which produce developmental anomalies. These include abnormally large or small eyes, absence of some important eye structure, opacities of the cornea, atrophy of the optic nerve, or a constant involuntary movement of the eyeball (nystagmus). There is very little definite information about the role of heredity in producing these eye defects, and more research will be necessary to find out the causes and methods of prevention. Frequently skilled ophthalmological care can improve the vision of an infant born with an eye defect, provided such treatment is begun soon after the baby's birth.

The second greatest cause of blindness or seriously impaired vision in young children is infectious diseases. Among these are syphilis and gonorr-

rehea. Syphilis transmitted by the mother to her unborn child has caused much unnecessary blindness. Prenatal syphilis can be prevented if the mother receives adequate treatment in the early months of her pregnancy. Every expectant mother should have a blood test as now required by many states.

Gonorrhea has been responsible for a great deal of blindness in children. If during the birth process any of the germs enter the baby's eyes, a serious infection may result and may cause either blindness or grave impairment of vision. The infection commonly known as "babies' sore eyes" can be prevented by the use of prophylactic drops in the eyes immediately after birth. Today some of the newer drugs offer the possibility of cure without visual loss, provided treatment is started as soon as symptoms of the disease appear. There is no excuse for life-long defective vision because of a disease that could have been prevented in childhood.

Blindness or loss of vision can result from certain other infectious diseases such as measles, scarlet fever, and pneumonia, or from focal infections such as diseased tonsils, abscessed teeth, infections of the sinuses, chronic diseases of the middle ear, general run-down condition, or poor nutrition. Skilled medical care during illness is the best way of preventing serious eye complications.

Among the other causes of blindness, or particularly the loss of one eye, are eye injuries suffered by children while playing. The following toys have been responsible for many eye injuries and should not be given to children: "BB" guns, sling shots, darts, arrows, swords, sharp-pointed scissors, pocket knives with sharp-pointed blades, and chemical sets which, if not used as directed, may cause serious injuries. No child should be allowed to play with blasting caps and detonating fuses. Adults who in their work use such articles should never leave them where children will find them.

Fireworks have been responsible for the loss of many a child's vision. Maryland forbids the use of fireworks except in community displays; consequently, in this State one of the leading causes of eye injuries has been eliminated.

Many older children have suffered eye injuries as a result of accidents in connection with poorly planned or poorly executed experiments in chemical laboratories. Other children have suffered loss of eyes or impaired vision from injuries suffered while taking vocational training courses. The compulsory wearing of goggles, plus training in the correct use of tools and machinery, with greater emphasis upon safety and good work habits, should eliminate these unnecessary accidents.

Serious eye injuries have resulted from sudden blows on the head and face in such sports as football, baseball, and boxing. Every eye injury

should be referred to an eye physician as soon as possible, because only he can decide after careful examination whether any serious damage has been done to the delicate eye structures. Prompt treatment has saved many eyes which otherwise would have been sightless as a result of injuries received during play or work.

SIGNS OF EYE TROUBLE IN CHILDREN

During the child's first few years the eye continues to grow and to develop important visual powers. Any defect will interfere with this development. Therefore it is important that parents and others who assume responsibility for the child's care be able to recognize common signs of eye defects. The sooner the child can receive skilled eye treatment, the better the chances are that the defects can be corrected with no or minimal loss of vision. Visual defects can handicap a child's mental and emotional development.

The following are the usual signs that something is wrong with the eyes:

BEHAVIOR

Attempts to brush away blur; rubs eyes frequently; frowns

Stumbles or trips over small objects

Blinks more than usual, cries often, or is irritable when doing close work

Holds books or small objects close to eyes

Shuts or covers one eye, tilts or thrusts head forward when looking at objects

Has difficulty in reading or in other school work requiring close use of the eyes

Is uninterested in distant objects or unable to participate in games, such as playing ball

Holds body tense or screws up face either for distant or for close work

Is sensitive to light

Is unable to distinguish colors

APPEARANCE

Red-rimmed, encrusted, or swollen eyelids

Repeated sties

Watery or red eyes

Crossed eyes

COMPLAINTS

Dizziness

Headaches

Nausea

Blurred or double vision

} following close eye work

If a child has any of these symptoms, he should be examined by an eye physician at once. Only the physician can give advice and treatment that may save the child from going through life handicapped by loss of vision.

EYE CONDITIONS PREVALENT AT SCHOOL AGE

Diseases of the eye occurring in children of school age are principally of two types: (1) diseases showing external signs of inflammation and (2) those revealing no such signs. Often impaired vision is the only evidence of a diseased condition.

Among the more common eye diseases of the first group are:

Diseases of the eyelids such as sties and granulated lids, which are the result of inflammation. Errors of refraction or run-down general health may be a contributing factor in recurrent sties.

Obstruction of the tear sac, which causes tears, mucus, and, frequently, pus to collect in the corner of the eye and flow over the lid onto the cheek.

Inflammation of the conjunctiva, called conjunctivitis. There are many varieties of conjunctivitis, but in each the following symptoms are usually present: redness, sensitivity to light, profuse tearing, itching or burning, pain, and discharge, usually in the nasal corner of the eye. Some of the varieties are not dangerous, but others can cause great loss of vision if not promptly and adequately treated. Since it is often difficult to differentiate between the unimportant and the dangerous types, the child should be examined by a physician at the first sign of symptoms. If proper treatment is started early enough, even the most dangerous variety can be cured without permanent loss of vision. One of the commonest and most contagious types is called pink eye. A child with inflamed eyes should be examined by a physician, and if found to have an infection which might be communicated to others, must be kept from school until the infection has disappeared.

Inflammation of the cornea, called keratitis. This is caused by germs which have invaded the cornea. Gonorrhea and syphilis are frequently responsible. Injuries from foreign bodies, contusions, burns, or penetrating wounds cause a break in the outer protective layer and allow germs to enter and attack the deeper structures. Any inflammation of the cornea is serious from the standpoint of vision, for the inflammation is likely to cause scar formation, which obstructs the line of sight. Immediate medical treatment on the first sign of eye inflammation or after any injury is the only sure way of preventing serious complications.

Inflammation of the iris and other internal eye structures. Such inflammation is serious and must receive immediate treatment. Often a focal infection somewhere else in the body, such as diseased teeth, tonsils, sinuses, or ears, may be the cause, and treatment of the focal infection as

well as of the eye itself may be necessary. Delay in treatment of almost any inflammation may be serious and in case of the eye may cause blindness.

Conditions not accompanied by signs of inflammation. Among the eye conditions which are found often in children of school age and which are not accompanied by signs of inflammation are: (1) cataract, which may be described as an opacity or cloudiness of the crystalline lens; (2) retinitis pigmentosa, which is an atrophy of the retina with increased pigment deposits; and (3) congenital glaucoma, a condition characterized by an increase in the pressure inside the eye and leading to atrophy or withering of the optic nerve. Another serious condition which has frequently resulted in complete blindness is sympathetic ophthalmia, characterized by serious inflammation of one eye following a perforating injury to and inflammation of the other. Refusal of the parent to allow the doctor to remove an eye that has been seriously injured, although its condition involves a risk for the good remaining eye, is often responsible for sympathetic ophthalmia. It is better for a child to sacrifice a badly injured eye and save the vision in the good eye than to run the risk of eventual blindness. In case of eye injuries consult an eye specialist without delay and follow his recommendations. He will not advise removal of an eye unless he believes that such removal is imperative to prevent a sympathetic involvement of the other.

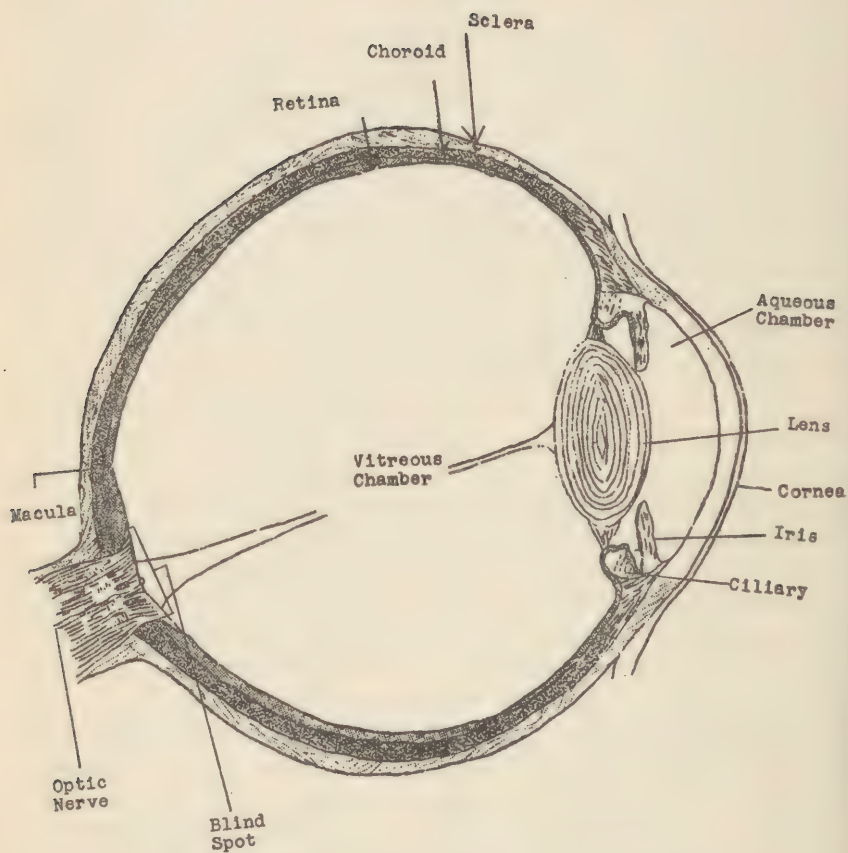
Another eye condition common among young children is strabismus, or crossed eyes. Observe the young child carefully and if one or both eyes turn inward or outward, consult the doctor without delay. The first signs of muscle imbalance often occur when the young child is tired, after prolonged use of the eyes for close work or after an acute illness. Another observable sign is the holding of the head in a peculiar position, such as tilting it when looking at an object. Weakness of one or more of the muscles which rotate the eye will cause constant strain, doubling of vision, and may eventually result in loss of the binocular vision. The treatment of crossed eyes usually consists in correcting any refractive error, even tiny children being able to wear glasses satisfactorily; in covering the eye with the better vision by a patch, to make the child use the eye with the poorer vision and thus improve it; and in giving muscle retraining or orthoptic training in an attempt to establish or re-establish normal binocular vision. In certain cases an operation on the eye muscles, to straighten the crossed eye, will be necessary and in addition subsequent muscle training to develop fusion and depth perception. The sooner treatment is begun in the case of a squint or crossed eye, the greater will be the possibility of preventing permanent visual loss. A common fallacy is that a young child will outgrow a crossed eye. Loss of vision in one eye is the price a child usually

pays when parents neglect having crossed eyes treated. Unless treatment is begun while the child is very young, vision cannot be restored, although the eye can be straightened and the child's appearance improved.

One can not emphasize too much the fact that a child with a crossed eye will feel different from other children and may even develop a sense of inferiority because of it. The careless and often cruel jeers of other children hurt a cross-eyed child and increase his sensitiveness. Many of these children will develop emotional problems which influence development and eventual success and happiness. Granted that the treatment of a crossed eye is a long and tedious process both for the child and for the parents, the prevention of a permanent visual loss should be well worth the effort. The parents' attitude will have a great deal of influence upon the child's cooperation during the treatment period, and without cooperation the doctor can not accomplish much. Do not overlook or neglect crossed eyes or squints. Good vision is one of the child's most valuable possessions and everything possible should be done to safeguard the eyes from injury, disease, or strain which will affect their efficiency.

THE EYES AND ERRORS OF REFRACTION

The eye is one of the most important and delicate organs of the body and its function is vision. Nature has provided protection from injury by surrounding the eyeball with a bony framework and soft tissues which tend to absorb shocks. The eyeball (see diagram on page 10) is made up of four layers of tissue. The outer layer (conjunctiva) is a mucous membrane. This covering is a protective flexible membrane in close contact with a similar membrane lining the lids, thus permitting free smooth rotation of the eyeball in all directions. The second layer (sclera) is a tough, fibrous, supporting structure. The cornea, the clear window in front through which visual rays pass to the retina, is continuous with these two layers, but differs essentially from them in that it is clear and transparent, whereas the conjunctiva and sclera are opaque. The middle coat (choroid) is made up mainly of blood vessels and pigment cells: it provides nourishment for the eye and prevents diffusion and scattering of the visual and light rays entering through the cornea and pupil. The iris is continuous with this layer, forms a delicate diaphragm stretching across the anterior part of the interior of the eye between the cornea and the lens, and is provided with a circular opening, called the pupil. Like the shutter of a camera, the pupil regulates the amount of light entering the eye. The inner coat is the retina, a thin, delicate membrane consisting of an expansion of the optic nerve. On the retina is the area of most distinct vision, the macula. The retina is sensitive to light and receives the images of external objects. The interior of the eyeball is filled with a fluid-like



HORIZONTAL SECTION - LEFT EYE

(Courtesy of the National Society for the Prevention of Blindness)

substance and is divided into two chambers by the lens. The anterior chamber contains the aqueous fluid and the posterior chamber the vitreous. Six muscles, which rotate the eye in various directions, are attached to the sclera and have their origin in the bony wall of the orbit.

The refractive apparatus contained in the eyeball has often been compared to a camera. Rays of light from any object must pass through the refractive media, cornea, aqueous fluid, lens, and vitreous, to reach the retina, or light-sensitive layer, before the object can be perceived. This operation corresponds with that of the focusing lens and darkened interior of a camera. The image formed on the retina is carried by the optic nerve to the visual centers of the brain. The curvature of the lens can be increased by action of the ciliary muscle, and thus objects at different distances can be focused on the retina. The ability of the eye to alter its focus is accommodation. We see an object only if the light becomes a nerve stimulus, is received by the brain, and becomes a visual sensation. Therefore, any defects in any part of the visual apparatus will interfere with vision. The defects can be of two types: (1) those resulting from disease or injury or those present at birth and (2) those caused by errors of refraction—hyperopia, myopia, and astigmatism.

Hyperopia, or farsightedness, means that the eye is capable of seeing well at a distance, but requires use of the accommodation to see near objects, to read, etc. Normal eyes are completely relaxed when they look at distant objects, because images fall directly on the retina. In farsighted eyes the image falls behind the retina, giving a blurred effect which is corrected and cleared automatically by action of the muscle of accommodation. In very farsighted eyes, the focusing muscles may be overworked and result in fatigue and inattentiveness, unless properly corrected by suitable glasses.

In myopia, or nearsightedness, the image falls in front of the retina and poor distant vision results. As nearsighted children have good vision for close work and poor vision for distant objects, they will usually prefer to play with toys and read books rather than take part in athletic games or do blackboard reading. Glasses will give this child normal distant vision and will help his focusing muscles to act normally. Periodic re-examination of the eyes is important, because there is a tendency for myopia to increase during childhood. In certain cases the nearsightedness increases progressively in spite of treatment, with a resultant loss of vision. In cases of this kind, the recommendations of a specialist must be followed if the child's remaining vision is to be conserved.

In astigmatism, caused by a difference in curvature of the vertical and horizontal meridians of the eyeball, the images on the retina are not

as distinct as they should be. Headaches are a common symptom and sometimes a child will complain of nausea or dizziness or may show evidence of reflex nervous disturbances. Glasses worn constantly will correct this condition and relieve the symptoms.

PART II

RESOURCES AND SPECIFIC SUGGESTIONS TO MEET THE PROBLEMS PRESENTED BY CHILDREN WITH IMPAIRED VISION

A WELL-ROUNDED CONSERVATION-OF-VISION PROGRAM

A well-rounded conservation-of-vision program must include the following steps:

1 Detection

- a Periodic visual screening examinations to discover visual defects, plus observation of the child by the teacher for detection of signs of eye trouble

2 Treatment

- a Examination of child's eyes by ophthalmologist for diagnosis, treatment, prognosis, and recommendations regarding correction of defect and adjustments in educational program
- b Provision of glasses or whatever other treatment is recommended to remove or minimize the handicap
- c Follow-up services to insure continued treatment and periodic re-examination

3 Educational Services

- a Educational opportunities suited to the needs of the children whose visual defects can not be fully corrected
- b Services for such children may include
 - (1) Special classes
 - (2) Special provisions in regular classrooms to enable partially sighted children to compete successfully with classmates

4 Community Cooperation

- a Community resources must be organized so that they can assist the school in meeting the problems (health, emotional, social, family, and recreational) which the partially sighted child presents and which, if not met, will cause the child to be so handicapped that he will be unable to use the available educational opportunities to develop his potentialities.

FACILITIES FOR THE DETECTION AND TREATMENT OF CHILDREN WITH VISUAL HANDICAPS

- 1 Present Facilities for Discovering Children with Impaired Vision
 - a Annual census of handicapped children
 - b Health Department discovers in its school health activities children with impaired vision
 - c Teachers, nurses, and social workers observe signs of eye trouble or poor vision
 - d Proposed plan of visual screening, followed by correction of defects, educational adjustments, and follow-up services
- 2 Facilities for Medical Treatment of Children with Impaired Vision
 - a Referral to eye clinics or eye physicians
 - b In communities without special eye clinics, referral to nurses connected with schools, who will be able to advise the parents regarding the available resources
 - c Referral to Maryland Society for Prevention of Blindness, 703 Calvert Building, Baltimore 2, which will make recommendations regarding available treatment resources
- 3 Present Agencies for the Educational Adjustment of Children with Impaired Vision
 - a State Department of Education, Lexington Building, Baltimore 1, Maryland
 - b County Superintendents of Schools
 - c Division of Special Education (for Baltimore City children), Board of Education, 3 East 25th Street, Baltimore 18, Maryland
- 4 Facilities for Vocational Training of Children with Impaired Vision
 - a At graduation from high school or at age of 16 or over, any individual with impaired vision may avail himself of the vocational guidance service offered by the State Rehabilitation Service, Lexington Building, Baltimore 1, Maryland

THINGS TO REMEMBER IN WORKING WITH A PARTIALLY SIGHTED CHILD

- 1 A child with a visual defect which can be corrected is not handicapped.
- 2 A child with a visual impairment is not "blind."
- 3 A child with a visual defect must be kept as normal as possible and everything must be done to prevent the impairment from progressing or the resultant handicap from becoming an obstacle to the child's normal development.
- 4 A child may be handicapped with only a slight impairment of vision. Whether he is handicapped depends largely upon the child and upon the type of eye difficulty he has. Some children handle a great loss better than other children handle a lesser one.

- 5 A visually handicapped child showing signs of nervousness and emotional instability should be referred for a thorough physical examination. Sometimes systematic conditions and the eye problem are related.
- 6 A child with impaired vision who appears dull and mentally retarded may not be able really to see the materials being used in the classroom. If he has difficulty seeing ink print, his vision is so impaired that he should be educated in a special class. In cases of this kind, seek skilled medical assistance in evaluating how much the child is capable of seeing and how he can best be educated in view of his visual impairment.
- 7 The visual defect of the child should not be constantly discussed in front of him. If the parents and the teachers have an attitude of acceptance, so will the child. A partially sighted child can be helped only by those who have his confidence and cooperation.
- 8 A child with a visual handicap is often fearful of the reaction of others to his defect. The attitude of society toward his handicap will have an effect upon his emotional and mental health. If the parents feel responsible for his handicap, they may overprotect the child in an attempt to make up for their neglect. Parents must be helped to realize the importance of providing the child with opportunities to develop his abilities and independence. Many will need help also to understand why they must not develop in their child a sense of self-pity or egoism as a result of the attention which he receives because of his handicap.
- 9 A child's adjustment to his visual handicap may be a long, slow process. Cooperation of all the persons interested in the child's welfare will be necessary. The child himself must not be allowed to feel handicapped.
- 10 A handicapped child desires to participate in all the activities of his companions, but fears that he will be slighted or shunned because of his inability to see distinctly. The attitude of the teacher will influence the other children, and if they understand the difficulty of the handicapped child, they will help him to overcome it.

THINGS TO DO FOR A VISUALLY HANDICAPPED CHILD

- 1 Have a sympathetic understanding of the visually handicapped child's problem and be able to give constructive help.
- 2 Learn about the psychological effects of a visual impairment.
 - a Admit that the defect is present but do not let it assume undue pro-

portions. Make certain that something constructive is done about it as soon as possible.

- 3 In addition to periodic eye examinations, make certain that the child's general health is as good as possible and that all remediable defects are corrected.
- 4 Know where to secure skilled advice in carrying out recommendations of the physician regarding adjustments in the child's school program.
- 5 Understand the purpose of a conservation-of-vision program and if possible visit a special class for the education of the partially sighted, so that you will know about the opportunities that can be made available to children with impaired vision.
- 6 Learn how to help a child overcome mannerisms and poor posture which may be related to his insecurity because of his poor vision.
- 7 Do not expect the child to compete with normally sighted children in games or contests requiring visual acuity.
- 8 Attempt to correlate the educational program with the child's activities outside school. It is important that the parents and others interested in the child understand the meaning of his handicap and the aim of the school program, in order to cooperate in plans for the child's education.

THE ROLE OF THE TEACHER IN THE EDUCATION OF A PARTIALLY SIGHTED CHILD

If a visual defect remains after treatment, the child must be given educational opportunities which will prepare him to compete with normally sighted individuals. The attitudes, habits, and experiences of his childhood will determine to a large degree his success or failure in later life. The proper education during early life is of paramount importance. The child with impaired vision must be educated so that he can make the best possible use of his remaining vision, and he must be helped to plan his education and choice of occupation in such a way that his visual capacity can be used to the greatest possible advantage. A child whose vision is between 20/200 and 20/70 in the better eye will probably need to have certain adjustments made in his school program, or placement in a special class, if one is available, may be advisable. Special educational media may be used to help a child with impaired vision overcome his handicap. These include moveable, adjustable desks; books with large, clear type; unglazed paper; soft, thick pencils and chalk which write with broad, clear lines; and large-type typewriters to reproduce lesson materials and to enable the child to prepare his written work. Other adjustments may be recommended by the eye physician. It has been estimated that two out of every one thousand children are so handicapped visually as to need special

provision for their education. Children who cannot read ink print are considered blind and must be taught to read braille.

The visually handicapped child is a challenge to his teacher, who may need skilled assistance in order to help him develop his potentialities. (See suggestions on page 13.) With such aid, intelligent, sympathetic teachers can solve the educational problems of partially sighted children by creating in the classroom conditions which will conserve vision and enable children to compete successfully with their classmates.

